

We Claim:

- 5           1.       A textile article having flame resistant properties comprising  
a plurality of inherently flame resistant fibers formed into a fabric, and  
a finish on the fabric,  
wherein the finish imparts a property selected from the group consisting of: an  
antimicrobial agent, a soil repellant and a fluid repellant.
- 10           2.       The textile article according to claim 1 wherein the finished textile  
article has a flame resistance that passes the standard method NFPA 701 – 1996  
edition testing protocol.
- 15           3.       The textile article according to claim 1 wherein the article is made of  
polyester fibers.
4.       The textile article according to claim 3 wherein the article is made of  
AVORA™ fibers.
- 20           5.       The textile article according to claim 1 wherein the antimicrobial agent  
is a molecularly bound antimicrobial agent.
6.       The textile article according to claim 5 wherein the antimicrobial agent  
is an organosilane.
- 25           7.       The textile article according to claim 6 wherein the antimicrobial agent  
is AEM 5700™.
8.       The textile article according to claim 1 wherein the fluid repellent is a  
30   fluorochemical.

9. The textile article according to claim 8 wherein the fluid repellent is also a soil repellent.

5 10. The textile article according to claim 9 wherein the fluid is ZONYL 7040™.

11. The textile article according to claim 1 wherein the textile article is a bedspread.

10 12. The textile article according to claim 1 wherein the textile article is a drapery.

15 13. The textile article according to claim 1 wherein the textile article is upholstery fabric.

14. The textile article according to claim 1 wherein the finish includes a flame retardant.

20 15. The textile article according to claim 14 wherein the flame retardant is a phosphonate.

16. The textile article according to claim 15 wherein the flame retardant is a cyclic phosphonate.

25 17. The textile article according to claim 16 wherein the finish includes Flame Retardant 50.

30 18. The textile article according to claim 1 wherein the article is made from Trevira CS fibers.

19. A textile article having flame resistant properties comprising

a plurality of inherently flame resistant polyester fibers formed into a fabric,  
and

a finish on the fabric including a cyclic phosphonate flame retardant,  
wherein the finish includes a molecularly bound antimicrobial agent which is

5 an organosilane, and a fluorochemical soil and fluid repellent, and

wherein the finished fabric has a flame resistance that passes the standard  
method NFPA 701 – 1996 edition testing protocol.

20. A textile article having flame resistant properties comprising  
10 a plurality of inherently flame resistant fibers formed into a fabric, and  
a finish on the fabric containing a fluorchemical, a cyclic phosphonate and an  
organosilane.

21. The textile article according to claim 20 wherein the finished textile  
15 article has a flame resistance that passes the standard method NFPA 701 – 1996  
edition testing protocol.

22. A method of finishing an inherently flame resistant fabric comprising:  
forming a fabric of inherently flame resistant fibers,  
20 saturating the fabric with a composition containing a fluorochemical  
and one or more of an antimicrobial agent, a flame retardant, a fluid repellent agent  
and a soil repellent agent,  
drying the fabric.

23. A method as claimed in claim 22 further comprising testing the fabric  
25 and determining that the fabric passes the standard method NFPA 701 – 1996 edition  
testing protocol.

24. A method as claimed in claim 22 wherein saturating is accomplished  
30 by padding.

25. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant is a phosphonate.

26. A method as claimed in claim 22 wherein saturating the fabric includes  
5 saturating with a composition in which the flame retardant is a cyclic phosphonate.

27. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant is Flame Retardant 50.

10 28. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant comprises between about 2 % and 10 % by weight of the composition.

15 29. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the flame retardant comprises about 4.8 % by weight of the composition.

20 30. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is a molecularly bound antimicrobial agent.

31. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is an organosilane.

25 32. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent is AEM 5700™.

30 33. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent comprises between about 0.2 % and 2.0 % by weight of the composition.

34. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the antimicrobial agent comprises about 0.48 % by weight of the composition.

5 35. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellent is also a soil repellent.

36. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellent is a fluorochemical.

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37. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellent is ZONYL 7040™.

38. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellent comprises between about 2 % and 10 % by weight of the composition.

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39. A method as claimed in claim 22 wherein saturating the fabric includes saturating with a composition in which the fluid repellent comprises about 3.6 % by weight of the composition.

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40. A method as claimed in claim 22 wherein forming includes fabric formation from Trevira CS fibers.

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41. A method as claimed in claim 22 wherein forming includes fabric formation from AVORA™ fibers.

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